

### **REMARKS**

Claims 1-42 are currently pending in the subject application and are presently under consideration. Claims 1 and 39 have been amended as shown on pp. 2 and 7 of the Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

#### **I. Rejection of Claims 1-29 and 39-42 Under 35 U.S.C. §101**

Claims 1-29 and 39-42 stand rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. It is respectfully submitted that this rejection is improper for at least the following reasons. The Federal Circuit has clearly established in *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005) and *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) that inventions such as that claimed by applicant are statutory.

This court must also decide whether software code made in the United States and exported abroad is a "component of a patented invention" under 271(f)... Section 271(f) refers to "components of a patented invention."... Title 35, section 101, explains that an invention includes "any new and useful process, machine, manufacture or composition of matter."... Without question, *software code alone qualifies as an invention eligible for patenting under these categories*, at least as processes. *Eolas Techs., Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1338 (Fed. Cir. 2005). (Emphasis added).

The Federal Circuit in *Eolas Techs., Inc. v. Microsoft Corp.* established that software code alone is statutory subject matter and thus patentable. In particular, independent claims 1 and 42, recite *a computer implemented system*, which is hardware. The components recited in claims 1 and 42 are implemented by a hardware computer system and are thus statutory. A system by itself is statutory subject matter. By the standards set forth in the above decision, a computer implemented system in the form of software, hardware, or the combination of both clearly falls within the categories of statutory subject matter. Furthermore, claim 39, as amended, recites *a computer executable API*, which is statutory subject matter and thus patentable.

In addition, the subject claims clearly produce a useful, concrete and tangible result.

Because the claimed process applies the Boolean principle [abstract idea] **to produce a useful, concrete, tangible result** ... on its face the claimed process comfortably falls within the scope of §101. *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358. (Fed.Cir. 1999) (Emphasis added); *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1601 (Fed.Cir.1998). The inquiry into patentability requires an examination of the contested claims to see if the claimed subject matter, as a whole, is a disembodied mathematical concept representing nothing more than a "law of nature" or an "abstract idea," or if the mathematical concept has been **reduced to some practical application rendering it "useful."** *AT&T* at 1357 citing *In re Alappat*, 33 F.3d 1526, 31 1544, 31 U.S.P.Q.2D (BNA) 1545, 1557 (Fed. Cir. 1994) (Emphasis added) (holding that more than an abstract idea was claimed because the claimed invention as a whole was directed toward forming a specific machine that produced the useful, concrete, and tangible result of a smooth waveform display).

Independent claim 1 recites a component that produces a concrete, useful, and tangible result in that it provides for identification of a subset of messages for further analysis. Independent claim 42 recites the classification of received messages as good or spam which is also a useful, concrete and tangible result. Furthermore, independent claim 39 recites calculation of spam probability and recommendation of a quarantine time both of which are useful, concrete and tangible results.

In view of the above, it is readily apparent that the claimed invention as recited in independent claims 1, 39 and 42 (and associated dependent claims 2-29 and 40-41) reduces to a practical application that produces a useful, concrete, tangible result; therefore, pursuant to *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1358 (Fed.Cir. 1999), the subject claims are directed to statutory subject matter pursuant to 35 U.S.C. §101. Accordingly, this rejection should be withdrawn.

## **II. Rejection of Claims 1-5, 8-12, and 16-42 Under 35 U.S.C. §102(c)**

Claims 1-5, 8-12, and 16-42 stand rejected under 35 U.S.C. §102(c) as being anticipated by Bandini, *et al.* (US Patent 7,117,358). It is respectfully submitted that this rejection is

improper for at least the following reasons. Bandini, *et al.* does not disclose or suggest each and every aspect set forth in the subject claims.

A single prior art reference anticipates a patent claim only if it *expressly or inherently describes each and every limitation set forth in the patent claim*. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaa Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The *identical invention must be shown in as complete detail as is contained in the ... claim*. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989) (emphasis added).

Applicants' subject claims disclose an intelligent quarantining system and method that facilitates a more robust classification system in connection with spam prevention. In particular, independent claims 1, 30, 39 and 42, as amended, recite similar aspects, namely, *classifying the untrustworthy or suspicious subset of messages as spam or good after a determined delay period*. Bandini, *et al.* is silent with respect to these novel aspects.

Bandini, *et al.* relates to a system for filtering communication wherein the system monitors incoming messages and compares the messages to data from a SPAM database to determine if the incoming message is legitimate or not. The SPAM database is constructed by responding to a user or administrator indications as to whether received messages are spam or not. (*See* Abstract.) If a comparison score, associated with a message and the SPAM database, is within a threshold range, the result is a borderline indication wherein the message is quarantined in a message store database and is examined by an administrator. (*See* column 4, lines 28-35.) Bandini, *et al.* is silent with respect to determining a delay period to hold the borderline messages in quarantine. The borderline messages are classified only when an administrator checks the messages and determines their classification. In a situation where the administrator does not check the borderline messages within a specific time, the messages will continue to reside in a quarantine folder and will not be transferred to an appropriate folder. The delay period for a borderline message (that has been verified by the administrator as safe) to be transferred into the inbox and viewed by the user is dependent on when an administrator checks the borderline message. Messages that are in the quarantine folder will not be transferred to an appropriate folder until the administrator makes a decision and can lead to unnecessary delays.

Bandini, *et al.* does not disclose determining a delay period for quarantined messages and delaying the quarantined messages such that one or more learning techniques are employed to receive additional data associated with the subset of messages during the determined delay period in order to automatically classify the messages.

Applicants' claimed subject matter, in contrast, relates to systems and methods for identifying both legitimate and undesired information for spam prevention by delaying delivery of suspicious messages until further information can be gathered about the messages to facilitate classification of such messages. Specifically, a delay period begins when the message is marked for quarantine and can continue for a particular amount of time set by the system or user. For example, the filter can provide a recommended quarantine time based in part on the next filter update (scheduled update). The quarantine period can be automatically or manually set for any length of time such as 1 hour, 6 hours, or 24 hours. This means that information can be collected for 1 hour, 6 hours, or up to 24 or more hours after the message was moved to the delayed message store. Since quarantining can be implemented by way of an API (application program interface), it is also possible to have  $m$  (e.g., an integer greater than or equal to 1) quarantine times (aggressive, moderate, conservative) passed into the appropriate API (*See* page 23, line 18 to page 24, line 5).

Furthermore, independent claim 1 recites the additional data includes data based on an analysis of the subset of messages. In particular, system feedback on the quarantined messages is collected. This can include data collected from monitoring at least a subset of messages in a quarantine folder for characteristics such as volume (low or high volume of message), similarity of message to other quarantined messages, and/or similarity of message to honeypot message. This information together with any available user feedback can be utilized by a filter update component as respective features (or training data) to train and update the filter(s). Following therefrom, updated filters can be generated. The quarantined messages can be, in substantial part, run through the updated filters to resume the classification process. (*See* page 15, lines 12-20.) Bandini, *et al.* teaches delaying of suspicious messages for later review by an administrator but does not employ system information to classify quarantined messages after a determined delay period.

In view of at least the foregoing, it is readily apparent that Bandini, *et al.* does not anticipate or suggest the subject invention as recited in claims 1, 30, 39 and 42 (and claims 2-5,

8-12, 16-29, 31-38 and 40-41 that depend there from). Accordingly, it is respectfully requested that this rejection be withdrawn.

**IV. Rejection of Claims 6, 7 and 13-15 Under 35 U.S.C. §103(a)**

Claims 6, 7 and 13-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bandini, *et al.* in view of Lin (US Patent 7,051,077). It is respectfully submitted that this rejection is improper for at least the following reasons. Bandini, *et al.* alone or in combination with Lin does not teach or suggest each and every aspect of the subject claims.

*[T]he prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 706.02(j). See also KSR Int'l Co. v. Teleflex, Inc., 550 U. S. \_\_\_, 04-1350, slip op. at 14 (2007). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).*

Applicants' claimed subject matter provides an intelligent quarantining system and method that delays delivery of suspicious messages until further information can be gathered about the messages to facilitate classification of such messages in connection with spam prevention. In particular, independent claim 1, as amended, recites a second classification component that after **a determined** delay period classifies the subset of messages based at least in part on one or more learning techniques that are employed to receive additional data associated with the subset of messages during **the determined delay period**. Bandini, *et al.* either alone or in combination with Lin, does not disclose this novel aspect.

Lin relates to a fuzzy logic voting method and system to classify emails. However, Lin is silent with respect to determination of a delay period as well as classification of a subset of messages based on learning techniques that are employed to receive additional data associated with the subset of messages during the determined delay period and thus fails to remedy the aforementioned deficiencies of Bandini, *et al.* with respect to independent claim 1.

In view of the above, it is readily apparent that Bandini, *et al.*, alone or in combination with Lin, fails to teach or suggest all features of applicants' invention as recited in independent

claim 1 (and claims 6-7 and 13-15 that depend therefrom), and thus fails to make obvious the subject claims. Accordingly, it is respectfully requested that this rejection be withdrawn.

**CONCLUSION**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP560US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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